

## ***Dimeria namboodiriana*, another new species of Poaceae from Kerala, India**

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### **Abstract**

A new species of *Dimeria* R. Br., viz. *D. namboodiriana*, is described and illustrated.

### **INTRODUCTION**

The authors made collections of a species of the tropical and subtropical genus *Dimeria* R. Br. from Kochu Pamba Hills and Ponnambalamedu, at an altitude of 1100 m, in Pathanamthitta Dist. of Kerala, India, which appeared to be distinct from all the known species of the genus. After consultation with Dr. Thomas A. Cope (K) the species was confirmed to be new.

The new species named as *D. namboodiriana*, described and illustrated here, is an addition to the already known species of the genus which has so far been represented by nearly 50 species world over, over 36 species in India, and 22 species in the state of Kerala. (Sreekumar & Nair, 1991; Ravi & Anilkumar, 1992; Ravi, 1995; Ravi *et al.*, 1995; Ravi, 1996; Mohanan & Ravi, 1996).

***Dimeria namboodiriana* Ravi & Mohanan, sp. nov. (Fig. 1)**

*D. ballardii* Bor affinis, sed distincta rhachidi complanata, late alata, ligulata, longiore, usque ad plus quam 1.5 mm lata, ad marginem sparsim brevi-ciliata, pedicellis brevioribus, 0.25-0.5 mm longis, ciliatis in lateribus, spiculis parvioribus, 4.5-5.75 mm longis, gluma inferior elliptico-oblonga, omnino secus carinam alata et dorsaliter ciliata, gluma superior elliptico-oblonga, infra 2/3 dorsaliter recta, tum abrupte incurva in apice acuminato-aristato, dorsaliter ciliata, ala superna papyracea, inferne suberosa, et lemmate superiore cum palea.

Type: India, Kerala, Pathanamthitta Dist., Ponnambalamedu, 5 Jan. 1996. *Ravi 24050* (Holo-TBGT; Iso-K, KFRI, L, MH).

Marshy perennial with runners rooting and producing solitary to densely tufted culms at nodes. Culms smooth, moderately thick, simple or branched, up to 50 cm tall. Leaves stiff and erect; sheath more or less distichous towards the base, up to 10 cm long, strongly keeled, striate

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and thickly ciliate with bulbous based hairs to almost glabrous towards the apex of the culm; blade elliptic-lanceolate, 20 cm x 7 mm, slightly narrowed to the rounded base, acuminate at the apex, densely ciliate with bulbous-based hairs all over, more prominently so on the upper side to sparsely ciliate, hairs up to 4 mm long; ligule membranous, up to 1 mm long, truncate, fimbriate at the apex. Racemes 2; rachis fuscous, straight, flattened on the back, shortly raised and convex on the face, broadly winged, up to 8 cm x 1.5 mm, and sparsely short-ciliate on the margins; pedicels flattened, 0.25-0.5 mm long, thickly ciliate on the outside, sparsely so on the inside. Spikelets fuscous, oblong-elliptic in profile, 4.5-5.75 mm long; callus 0.25-0.4 mm long, thickly bearded with hairs up to 0.4 mm long. Lower glume elliptic-oblong, 3.5-4 x 0.75-1 mm, acute-aristate at the apex, keeled on the back and the keel winged; wing broadest above the middle tapering to both ends, sparsely to moderately ciliate or not on the margins except towards the scaberulous apex; sides coriaceous, minutely scaberulous especially towards the apex. Upper glume more or less oblong-elliptic, 4-5.5 x 1-1.25 mm, keeled on the back and the keel broadly winged all along; wing 0.3 mm wide, corky 2/3 below, papery towards the apex, straight on the back in the lower 2/3 and then abruptly incurved into an acuminate-aristate apex and sparsely to moderately ciliate on the margins except towards the scaberulous apex; sides subcoriaceous, minutely scaberulous especially in the lower half and sparsely short-ciliate towards the wing; margin hyaline, sparsely ciliate in the middle. Lower lemma hyaline, oblanceolate, 2.25-3.25 x 1 mm (when unfolded), acute at the apex, cuneate towards the base, 2-nerved, sparsely ciliate on the margins from below the middle upwards. Upper lemma hyaline, oblanceolate, 3.4-4 x 0.75 mm (when folded), 1-nerved, bifid with acute lobes at the apex, sparsely short-ciliate towards the apex or not, awned from the sinus and the awn up to 10 mm long with a column up to 3.5 mm long and scaberulous. Palea short, more or less elliptic, ca. 0.5 mm long, acute at the apex and papillate on the surface with 1 or more long cilia. Lodicules 2, ca. 0.3 mm long, truncately lobed at the apex and cuneate at the base. Stamens 2; anthers 2-2.25 mm long. Grains oblong-elliptic, ca. 2 x 0.5 mm, biconvexly flattened and subacute at the apex.

*Distribution:* So far known only from the type locality.

*Etymology:* The specific epithet of the new taxon is in honour of Prof. (Dr.) A.N. Namboodiri who was the senior author's teacher and a constant source of inspiration to him to carry on research, and who has made invaluable contributions in the fields of botanical teaching and research in the state.

*Dimeria namboodiriana* is allied to *D. ballardii* Bor, but is distinct in having flattened, broadly winged and strap-shaped, wider up to 1.5 mm wide rachis sparsely short ciliate on the margins, shorter 0.25-0.5 mm long pedicels, ciliate on the sides, smaller 4.5-5.75 mm long spikelets, elliptic-oblong lower glume winged all along the keel and ciliate on the back, elliptic-oblong upper glume straight on the back in the lower 2/3 and then abruptly incurved into an acuminate-aristate apex, ciliate on the back and the wing papery above and corky below and palea for the upper lemma.

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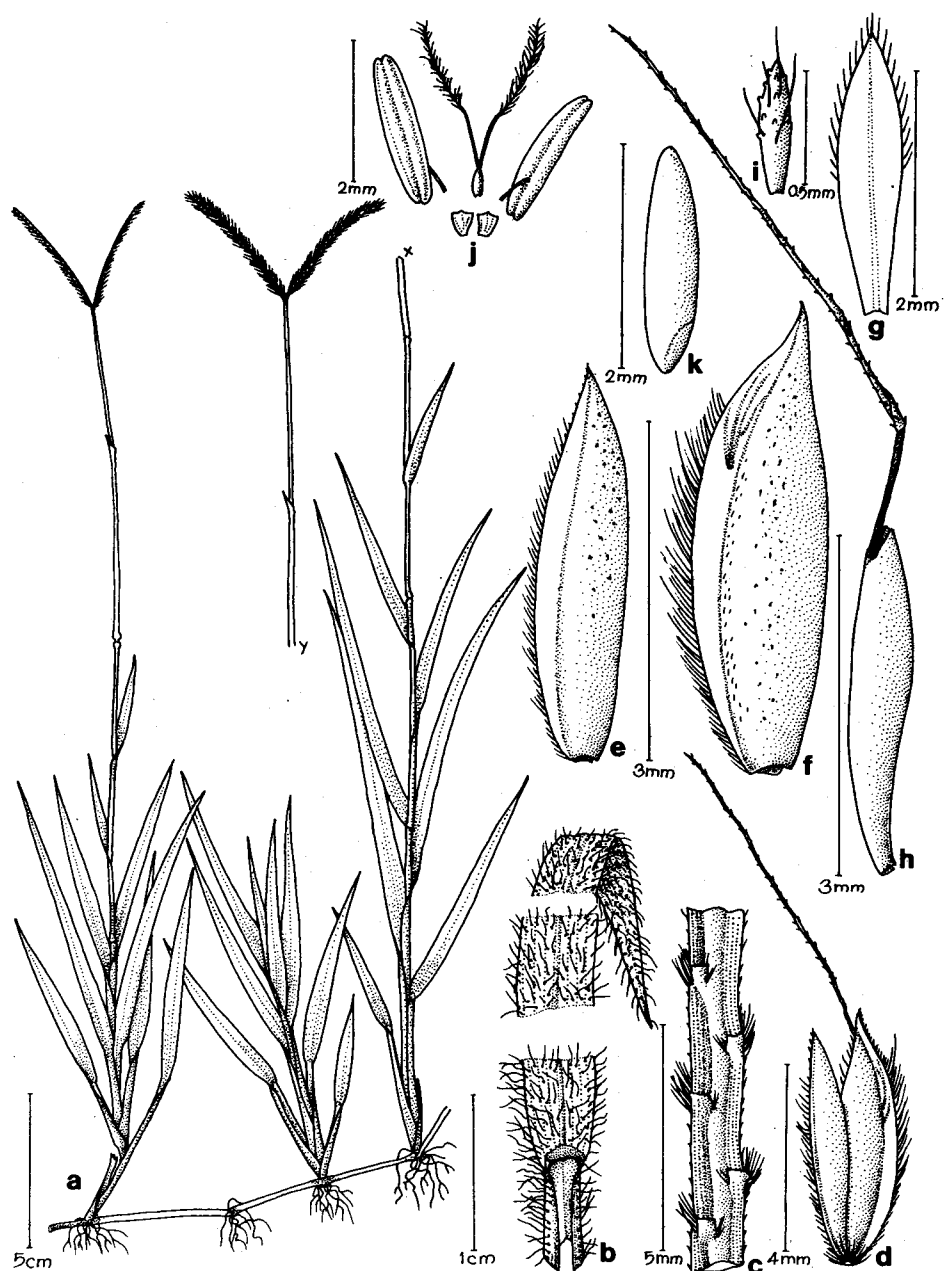


Fig. 1. *Dimeria namboodiriana* Ravi et Mohanan, *sp. nov.* a. Habit; b. Leaf; c. Rachis; d. Spikelet; e. Lower glume; f. Upper glume; g. Lower lemma; h. Upper lemma; i. Upper palea; j. Lodicules, Stamens & Pistil; k. Grain.

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The new taxon can be accommodated in the key provided by Bor (1960), which is the latest one on *Dimeria* of the Indian subcontinent, alongside *D. ballardii* with the key lead number 6 (Bor, *l.c.*, p.136) as keyed out below:

6. Rachis flattened or triangular in section

7. Spikelets often fuscous, 4.5-7 mm long; acuminate or acute.

7a. Rachis flattened, sparsely ciliate; racemes 2, widely divergent; both glumes winged, wings ciliate on the margins, wing of the upper glume corky below, papery above; anthers 2-2.5 mm long ..... *D. namboodiriana*

7a. Rachis triangular in section, glabrous.

9. Upper glume with a broad wing from base to apex; racemes 2, widely divergent; leaves congested at the base where the internodes are very short ..... *D. ballardii*

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